

Response to Written Comments and Staff Initiated Changes

Draft Waste Discharge Requirements Order No. R1-2019-0006 National Pollutant Discharge Elimination System (NPDES) for the City of Arcata Wastewater Treatment Facility

Regional Water Quality Control Board, North Coast Region
October 17, 2019

Comment Letter Received

The deadline for submission of public comments regarding draft Time Schedule Order No. R1-2019-0011 and Waste Discharge Requirements for Order No. R1-2019-0006, National Pollutant Discharge Elimination System Permit (Draft Permit) for the City of Arcata (hereinafter Permittee), Wastewater Treatment Facility (Facility) was May 6, 2019. The Permittee provided timely comments via email which are shown in italics and are followed by the Regional Water Board staff (Staff) response. Text to be added is identified by underline and text to be deleted is identified by ~~strike-through~~ in this document. The term “Draft Permit” and “Tentative Order” refers to the draft that was sent out for public comment. The term “Proposed Permit” refers to the version of the permit that has been modified in response to comments and is being presented to the Regional Water Board for consideration.

NPDES Draft Permit Comments

***Comment 1:** Finding II.C describes the provisions and requirements of the Tentative Order that implement State law only. The City has identified additional subsections of the permit that implement State law only and should be identified in the Findings. The requested revisions are identified below.*

Findings II.C. [Page 4]

“The provisions/requirements in subsections III.E, III.F, V.B, VI.C.5.a, IV.A.2., IV.B., IV.C, IV.D, VI.C.2.b, VI.C.5.c.ix and x, and VI.C.5.d of this Order and section X.E of the Monitoring and Reporting Program (MRP) are included to implement state law only.”

Response 1: The sections in Comment 1 are related to:

1. Section IV.A.2. Final Effluent Limitations – Discharge Point 002
2. Section IV.B. Land Discharge Specifications and Requirements
3. Section IV.C. Water Recycling Specifications and Requirements
4. Section IV.D. Other Requirements
5. Section VI.C.2.b. Climate Change Readiness Study Plan

Sections IV.A, IV.B and IV.C of the Proposed Permit were modified to clearly state which effluent limitations are in effect at a specific time during the phasing of the Proposed Upgrade Project.

Therefore, Finding II.C. in the Proposed Permit has been modified to include section IV.D, IV.E, IV.F, IV.G, and VI.C.2.b. which correlate to numbers 2 through 5 listed above.

Section IV.A.2 of the Draft Permit was moved to Section IV.C.1 of the Proposed Permit. It was retained in the Proposed Permit because it includes Technology Based Effluent Limitations (TBELs), which implement Federal Regulations, that will take effect upon completion of the Proposed Upgrade Project.

Comment 2: *The Arcata Marsh Wildlife Sanctuary (AMWS) is a Water of the State and “Discharge Specifications” have historically been assigned to regulate effluent quality discharged to the AMWS. The compliance approach is being revised to incorporate representative effluent monitoring locations as part of City’s Proposed Treatment Upgrade Project. Depending on the constituent and how it will be regulated at Discharge Point 002, the terms “Discharge Specifications” and “Effluent Limitations” may need to be exchanged or added to the following sections of the Tentative Order.*

EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS IV.A.2 [Pages 7 to 8]

EFFLUENT MONITORING REQUIREMENTS IV.B [Table E-4, Pages E-5 to E-6]

REPORTING REQUIREMENTS X.B.6.a [Page E-18]

RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS IV.D.3 [Page F-39]

RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS VII.B [Page F-44]

RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS VII.B.2 [Page F-45]

Response 2: Section IV of the Proposed Permit has been modified to more clearly articulate which effluent limitations and discharge specifications are in effect during the various phases of the Proposed Upgrade Project Section IV.D.1 of the Proposed Permit was also modified to include Discharge Specifications at Discharge Point 002 (AMWS) for equivalent to secondary BOD₅, TSS, pH, total chlorine residual and settleable solids. Specifically we revised the Proposed Permit with the following language:

Section IV.D.1. of the Proposed Permit states, “Discharge Specifications for Discharge Point 002 are in effect until activation of the oxidation ditch in Phase Two of the Proposed Treatment Upgrade or until June 30, 2024, whichever comes first.”

In addition to the above modification, Sections IV.A, IV.B and IV.C of the Proposed Permit were modified to clearly state which effluent limitations are in effect at a specific time. Section IV.A. was modified to include effluent limitations for Discharge Point 001 prior to completion of Phase One and Phase Two of the Proposed Upgrade Project. Language was added to state, “These limitations apply until Phase One of the Upgrade Project is complete. Time Schedule Order No R1-2019-0011 has a compliance date for Phase One of June 30, 2022.”

Section IV.B. of the Proposed Permit was modified to include effluent limitations for Discharge Point 001 and Discharge Point 003 after Phase One of the Proposed Upgrade Project is completed. Discharge Point 001 will only be used for flows exceeding 5.9 mgd, while Discharge Point 003 will be the new every-day discharge location.

Section IV.C. of the Proposed Permit was modified to include effluent limitations for Discharge Point 002 and 003 after completion of Phase Two of the Proposed Upgrade Project. This modification reflects that compliance with TBELs will be determined at Discharge 001 and 003 until the Proposed Upgrade Project is complete. Once the Proposed Upgrade Project is complete, then compliance with TBELs will be determined at Discharge Point 002.

Comment 3: *The BOD₅, TSS, and percent removal effluent limitations prescribed for Discharge Point 001 were calculated as Equivalent to Secondary Treatment Standards using the process defined in 40 C.F.R. section 133.105(f). However, the effluent dataset utilized for the calculation is not representative of the current WWTF operation and performance because it did not include the most recent 27 months of results (February 2017 to April 2019). The City requests consideration of the more recent data, recalculation of the Average Monthly Effluent Limitation (AMEL) and Average Weekly Effluent Limitation (AWEL) for Discharge Point 001, and recognition of two significant figures when the final effluent limitations are prescribed. Revisions to the following sections of the Tentative Order will be needed to reflect the revised effluent limits and changes to the recalculation process.*

EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS IV.A.1.a [Table 4, Page 6]

EFFLUENT LIMITATION AND DISCHARGE SPECIFICATIONS IV.A.1.B [Page 6]

RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS IV.B.2.a [Page F-19]

Response 3: Staff has recalculated the effluent limitations for BOD₅ and TSS using data collected from February 2017 through April 2019. Staff agrees this dataset is representative of the current Facility performance. The resulting 95th percentiles of 30-day averages for BOD₅ and TSS are 38 mg/L and 32 mg/L, respectively. The resulting 95th percentiles of 7-day average BOD₅ and TSS are 57 mg/L and 48 mg/L respectively.

Percent removal requirements for BOD₅ and TSS at Discharge Point 001 have been retained from Order No. R1-2012-0031 and are based on the equivalent to secondary treatment requirements in 40 C.F.R. section 133.105.

The Average Monthly 95th percentiles effluent limitations for BOD₅ and TSS has been updated for Discharge Point 001, in Table 5, of the Proposed Permit to reflect the recalculated values stated above. Additionally, the same BOD₅ and TSS limitations are used in the Discharge Specifications in Section IV.D. of the Proposed Permit.

Comment 4: *Effluent limitations and monitoring requirements for settleable solids are not required by state regulations or the North Coast Water Quality Control Plan (Basin Plan). TSS is a better indicator of secondary effluent quality and the Tentative Order includes TSS requirements for Discharge Points 001 and 002. Recent permits adopted in Region 1 for WWTP operation (e.g., City of Ukiah, Airport-Larkfield-Wikiup Sanitation Zone) have not included limits or monitoring requirements for settleable solids. The City requests removal of settleable solids requirements in the provisions identified below.*

EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS IV.A.1.a [Table 4, Page 6]

EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS IV.A.2.a [Table 5, Page 7]

EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS IV.A.3.a [Table 6, Page 8]

EFFLUENT MONITORING REQUIREMENTS IV.A.1 [Table E-3, Page E-4]

EFFLUENT MONITORING REQUIREMENTS IV.B.1 [Table E-4, Page E-5]

EFFLUENT MONITORING REQUIREMENTS IV.C.1 [Table E-5, Page E-6]

Response 4: Effluent limitations for settleable solids reflect levels of treatment attainable by secondary treatment facilities. The Water Quality Control Plan for the North Coast Region (Basin Plan) contains a narrative Water Quality Objective (WQO) that states, "Waters shall not contain substances in concentrations that result in deposition of material that causes nuisance or adversely affect beneficial uses." These limitations are based on the Basin Plan water quality objective prohibiting bottom deposits for all surface waters of the North Coast Region. Unlike the permits referenced in Comment 4 above, the Permittee's monitoring data collected during Order No. R1-2012-0031 (2012 Permit) showed reasonable potential (RP) to violate the settleable solids effluent limitation in the 2012 Permit. Accordingly, effluent limitations and monitoring requirements are required for settleable solids and are retained in the Proposed Permit.

Comment 5: *Some of the effluent limitations specified for Discharge Point 001 and Discharge Point 002 will not be in effect until the Proposed Treatment Upgrade Project is completed. During the transition period, compliance will be evaluated under terms specified in Time Schedule Order (TSO). However, monitoring at EFF-001 and EFF-002 will be conducted as specified in the Tentative Order starting on the effective date of the new permit. The implementation approach needs to be correctly described in the permit and Attachment E. The following sections of the Tentative Order are affected by this change.*

EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS IV.A.1 [Modify Footnote, Page 6]

EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS IV.A.2 [Add Footnote, Page 7]

EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS IV.D.1 [Modify Footnote 1, Page 9]

EFFLUENT MONITORING REQUIREMENTS IV.A.1. [Modify Footnote 1, Page E-4]

Response 5: See Response 2 above which states that Section IV of the Proposed Permit has been modified to more clearly articulate which effluent limitations and discharge specifications are in effect during the various phases of the Proposed Upgrade Project.

Footnote 1 on Page E-4 of the MRP in the Proposed Permit has been modified to state, “The routine monitoring requirements are in effect until the Permittee begins discharging effluent to EFF-003. Once discharge begins at EFF-003, EFF-001 will be used for the discharge of emergency flows exceeding 5.9 mgd. Monitoring at EFF-001 will then be required for each discharge event.”

Comment 6: *The City requests fecal coliform effluent limitations consistent with the limits prescribed in the current NPDES permit (Order No. R1-2012-0031). The following changes are suggested for consistency.*

EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS IV.A.1.c [Page 7]

- i. The median concentration shall not exceed a Most Probable Number (MPN) of 14 per 100 milliliters (mL) using bacteriological results of the last ~~7 days~~ calendar month for which analyses have been completed; and*
- ii. The number of fecal coliform bacteria shall not exceed an MPN of 43 per 100 mL in more than 10% of one samples collected in any ~~30-day period~~ calendar month.*

EFFLUENT LIMITATION AND DISCHARGE SPECIFICATIONS IV.A.2.c [Page 8]

- i. The median concentration shall not exceed a Most Probable Number (MPN) of 14 per 100 milliliters (mL) using bacteriological results of the last ~~7 days~~ calendar month for which analyses have been completed; and*
- ii. The number of fecal coliform bacteria shall not exceed an MPN of 43 per 100 mL in more than 10% of one samples collected in any ~~30-day period~~ calendar month.*

Response 6: The requirement to use the bacteriological results of the last 7 days was incorrectly noted in the Draft Permit. Staff agrees that the Permittee shall use the results of the last calendar month instead. Therefore, the requested changes, including insertion of “fecal”, have been made to the Proposed Permit.

Comment 7: *Due to natural treatment system influence, the City will not be able to control the Ultraviolet Light Transmittance (UVT) for effluent disinfected at Discharge Location 002. The UVT will be measured and used in the disinfection dose calculation, but UVT correlates with UV operational efficiency, not UV effectiveness. Therefore, the City requests removal of UVT requirements and use of the UV dose limitation to determine UV effectiveness. The specific changes to the Tentative Order are presented below.*

EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS IV.D.e [Page 9]

~~*e. Ensure that the UVT (at least 254 nanometers) in the wastewater does not fall below 35 percent of maximum at any time.*~~

OTHER MONITORING REQUIREMENTS IX.A.1.b and IX.A.1.c [Page E-16]

~~*b. Compliance. The UVT shall not fall below 35 percent of maximum at any time. The operation UV dose shall not fall below 50 millijoules per square centimeter (mJ/cm²) at any time. Flow through the UV disinfection system shall not exceed peak design flow for the UV system.*~~

~~*c. Reporting. If the UVT falls below 35 percent or UV dose falls below 50 mJ/cm², the event shall be reported to the Regional Water Board by telephone within 24 hours. Any inadequately treated and disinfected wastewater shall be diverted to a storage basin or an upstream process for adequate treatment.*~~

Response 7: Staff does not concur with the recommended change to remove UVT requirements; thus, no changes have been made to the Proposed Permit. Documents submitted to the Regional Water Board by the Permittee's consultant states that the design UVT for the pond and wetland system will be 35% of maximum. Once the oxidation ditch is online, the Permittee will be able to meet a UVT of 55 % before discharging to the AMWS.

A 2011 UV Pilot Study analyzed the ability of the Trojan UV3000 UV treatment unit to meet fecal coliform effluent limitations. The study showed that the Trojan UV3000 unit can meet the fecal coliform effluent limitations at a UV Dose of 35 mJ/cm² prior to discharge to the AMWS. The UV disinfection system in the Proposed Upgrade Project has a design dose of 50 mJ/cm². The UV disinfection system will be sized based on the UVT of 35% of maximum, a UV dose of 50 mJ/cm² and 50% redundancy. The Proposed Permit establishes the disinfection specifications that the Pilot Study indicated were achievable.

Continuous measurement of UVT and dose is required to ensure a continuous measure of adequate disinfection, and as an alternative to fecal indicator bacteria being sampled more frequently. Therefore, the UVT of 35% of maximum requirement is retained in the Proposed Permit.

Comment 8: *The Tentative Order does not identify the MUNICIPAL AND DOMESTIC WATER SUPPLY (MUN) beneficial use for Humboldt Bay. The City requests removal of Receiving Water Limitations that are based on MUN beneficial use in Humboldt Bay in the following sections of the Tentative Order.*

RECEIVING WATER LIMITATION V.A.13 [Page 12]

RECEIVING WATER LIMITATION V.A.16 [Page 12]

RECEIVING WATER LIMITATION V.A.17 [Page 12]

Response 8: These receiving water limitations are based on Basin Plan Water Quality Objectives (WQOs) and are not strictly for the protection of the MUN beneficial use. Humboldt Bay has been designated with the REC-1 beneficial use. Ingestion of water is

reasonably possible for recreators in Humboldt Bay. Therefore, no changes have been made to the Proposed Permit.

Comment 9: *The City's AMWS Special Study Monitoring Plan requires ammonia monitoring three times per month, no less than five days apart. The City requests the following changes to the Tentative Order to facilitate WWTP staffing arrangements and to be consistent with the monitoring plan approach.*

PROVISIONS VII.C.2.a.ii [Page 15]

- ii. Nutrient levels/enrichment of the AMWS, including but not limited to ~~weekly monitoring for ammonia~~ monitoring for ammonia according to the schedule in the AMWS special study monitoring plan to determine natural cyclical loading from the AMWS;*

Response 9: The recommended changes have been made to Section VI.B.2.a.ii on page F-44 of the Fact Sheet in the Proposed Permit with the addition of a footnote that states "The AMWS special study states that monitoring for ammonia shall occur at a minimum frequency of three times per month, no less than five days apart".

Comment 10: *The City is taking immediate actions to prepare the WWTF and its collection system for extreme wet weather events. These activities include but are not limited to ensuring availability of mobile pumps to drain low lying areas, storing sand bags for use in preventing inundation, preparing SOPs to respond to flood events, and developing public notification procedures and signage, etc. Additional time is needed to determine and evaluate the potential effects of climate change on the facilities. The City requests a 2-year extension of the deadline for submitting the Climate Change Readiness Study Plan as shown below.*

PROVISIONS VII.C.2.b [Page 16]

Extreme weather events, sea level rise, shifting precipitation patterns, and temperature variability, all intensified by climate change, have significant implications for wastewater treatment and operations. In order to ensure that Facility operations are not disrupted, compliance with conditions in this Order are achieved, and receiving waters are not adversely impacted by permitted and unpermitted discharges, a Climate Change Readiness Study Plan shall be submitted to the Regional Water Board by June 1, ~~2021~~ 2023, for Executive Officer review and approval.

Response 10: Staff agrees to extend the due date of the Climate Change Readiness Study Plan by one year to June 1, 2022. It is important for the Permittee to evaluate the impact of climate change events including, but not limited to sea level rise (SLR), storm surge and consecutive large rain events on the existing treatment plant, collection system and discharge locations. Additionally, the Permittee is upgrading its treatment facility and changing discharge locations. These projects require significant capital investment and are being constructed at the existing wastewater treatment plant, adjacent to Humboldt Bay.

Regional Water Board staff recognizes that evaluating and understanding the impacts of climate change can take considerable time and resources. However, Humboldt Bay

authorities have been developing SLR models and reports to help plan for future projects. A January 2018 Sea Level Rise Assessment Report (SLR Report) for the Humboldt County Humboldt Bay Area Plan was developed by Aldaron Laird of Trinity Associates. The SLR Report analyzes the inundation of Humboldt Bay for design horizons of 2030 (0.9 feet), 2050 (1.5 feet), 2070 (3.2 feet) and 2100 (5.4 feet). The SLR Report indicates that 0.9 feet of SLR is enough to inundate the current process components at the Facility.

The Regional Water Board believes that it is in the best interest of the Permittee to evaluate the ability of the Facility to withstand the effects of climate change as quickly as possible, but agrees that providing additional time for the Permittee to conduct a thorough evaluation of the threat to its wastewater infrastructure is reasonable. Therefore, the due date in the Proposed Permit has been changed from June 1, 2021 to June 1, 2022.

Comment 11: *When the NPDES permit is adopted, the City will review its existing pretreatment program and modify the program as needed. In addition, the City is planning to revise its Local Limits when the new secondary treatment system is online. The Tentative Order appears to require development of an entirely new pretreatment program, which is unnecessary and unwarranted. The City requests revisions to clearly state that changes to the pretreatment program are only required if needed to ensure compliance with new NPDES permit conditions. The following section of the Tentative Order will be affected by this change.*

PROVISIONS VII.C.2.c [Page 16]

Response 11: The pretreatment language in Section VII.C.2.c. of the Draft Permit was added at the request of U.S. EPA in order to obtain a more detailed description of the Permittee's pretreatment program. While Staff acknowledge that the Permittee has developed a substantial pretreatment program over the last two permit terms, obtaining this information is necessary because the Permittee has identified Significant Industrial Users and Categorical Industrial Users that are discharging to the Permittee's collection system. With full documentation of a pretreatment program, Staff can assess compliance with the pretreatment program by referencing the requirements in Section VII.C.2.c. of the Proposed Permit.

The Permittee also serves two separate Industrial Users that require a Multi-Jurisdictional Agreement (Humboldt State University and Fieldbrook-Glendale Community Services District) in order to legally implement the pretreatment program. If the Permittee reviews its current pretreatment program and finds that it meets all the requirements in Section VII.C.2.c. of the 2019 Permit, then no changes will need to be made and the Permittee may submit the sections listed in Section VII.C.2.c. of the 2019 Permit as one package. If changes are required to any of the sections listed, then the Permittee will amend those sections that require updating and submit all sections as one pretreatment program package.

Staff also recognizes that the Local Limits Study will need to be re-done once Phase One and Phase Two of the Proposed Upgrade Project is completed. Therefore, Section

VII.C.2.c.iii of the 2019 Permit has a new footnote on page 20 that states, "A new Local Limits Study will be performed once Phase Two of the Proposed Upgrade Project is completed. The 2019 TSO establishes a compliance schedule for completion of the Proposed Upgrade Project."

Section VI.C.2.d. on page 20 of the Proposed Permit has also been modified as follows, "The Permittee shall review the existing sections in the pretreatment program and submit, for Executive Officer review and approval, a written description of the pretreatment program. The written description of the pretreatment program shall be submitted by December 31, 2023...."

Comment 12: *Compliance with bacteria effluent limitations is based on use of "<" and ">" values not the "ND" and "DNQ" values assigned to chemical constituents. The following changes are requested to be consistent with symbology used in MPN value tables and to reflect bacteriological test results.*

COMPLIANCE DETERMINATION VII.H.1 [Page 26]

1. **Median.** *The median is the central tendency concentration of the pollutant. The data set shall be ranked from low to high, ranking the ~~ND~~ "<" concentration lowest, followed by the quantified and ">" values....If the data set has an odd number of data point, the median is the average of the two middle values, unless on or both of the points are "<" or ">" ~~ND or DNQ~~, in which case the median value shall be the lower of the two middle data points. ~~DNQ is lower than a detected value, and ND is lower than DNQ.~~*

Response 12: For the purpose of calculating the median, ND's represent a reported result less than the method detection limit (MDL). If the calculated median is ND, that value should be reported as ND and its MDL for Staff to determine compliance. Therefore, no change was made to the Proposed Permit.

Comment 13: *As required by California Environmental Laboratory Accreditation Program (ELAP), the Method Detection Limit (MDL) is defined using EPA's 2017 MDL revision. The following changes are requested to implement this definition.*

DEFINITIONS [Page A-3]

Method Detection Limit (MDL). *The minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is distinguishable from method blank results greater than zero, as defined in 40 C.F.R. part 136, ~~Attachment B~~, revised as of July 3, 1999 August 28, 2017.*

Response 13: The requested change has been made to the Definition on page A-3 of the Proposed Permit.

Comment 14: *The boundary of the WWTF needs to be consistent between figures shown in Attachment B. Revised Attachment B-1 (that includes the Brackish Marsh) is provided with these comments.*

Response 14: The revised Attachment B-1 has been inserted into the Proposed Permit.

Comment 15: *The process flow schematic for the Upgrade Project has been modified. The new schematic shows the “Adaptive Management Diversion Line (A-Line)” as described in the 9/21/18 letter to Justin McSmith. Revised Attachment C-2 is provided with these comments.*

Response 15: The revised Attachment C-2 has been inserted into the Proposed Permit.

Comment 16: *The City requests clarification to the description of Monitoring Location Description EFF-001.*

MONITORING LOCATIONS II. [Table E-1, Page E-3]

Location where representative samples of treated wastewater, to be discharged to Humboldt Bay at Discharge Point 001, can be collected at a point following chlorination/dichlorination disinfection and prior to contact with Humboldt Bay.

Response 16: The recommended change has been made to Page E-3 in the Proposed Permit.

Comment 17: *Representative samples at EFF-003 should include any flow that might occur through the A-line. The following changes are requested to incorporate this flow condition into the description of Monitoring Location EFF-003.*

MONITORING LOCATIONS II. [Table E-1, Page E-3]

Location where representative samples of treated wastewater following the three ~~enhancement marshes in the AMWS~~, to be discharged to the brackish marsh at Discharge Point 003, can be collected at a point prior to contact with the brackish marsh.

Response 17: The recommended change has been made to Page E-3 in the Proposed Permit.

Comment 18: *For chlorine residual monitoring at EFF-001 and EFF-002, the numeric limits defined in the permit should be referenced in the table notes instead of “no detectable concentration.” The following changes are requested to make this clarification.*

EFFLUENT MONITORING REQUIREMENTS IV.A.1. [Table E-3, Page E-5, Table Note 10]

Chlorine residual monitoring at Monitoring Locations EFF-001 shall demonstrate that chlorine residual complies with effluent limits in Table 4 ~~that there is no detectable chlorine~~ during periods of discharge to Humboldt Bay...

EFFLUENT MONITORING REQUIREMENTS IV.A.1. [Table E-4, Page E-6, Table Note 6]

Chlorine residual monitoring at Monitoring Locations EFF-002 shall demonstrate that chlorine residual complies with effluent limits in Table 5 ~~that there is no detectable chlorine~~ during periods of discharge to the AMWS...

Response 18: The recommended changes have been made to Table Notes in Table E-3 and Table E-4 of the Proposed Permit.

Comment 19: *The Humboldt County Public Health Lab is only accredited for enterococcus testing in surface water (not wastewater) and there is no ELAP accredited laboratories available within the required travel time from Arcata. For compliance testing, the analytical method recommends analysis immediately or within 2 hours after sample collection and the maximum transport time to a laboratory of 6 hours. As a result, the City does not have any immediate options for wastewater enterococcus testing and will need to obtain ELAP certification to conduct the analyses in-house. Due to ongoing program changes at ELAP, the City estimates it will take 1 to 2 years to obtain method accreditation. The City has begun acquiring testing supplies and developing SOPs to prepare for accreditation but will need additional time to start enterococcus monitoring at its in-house laboratory. A one-year extension and the following changes are requested for the Tentative Order.*

EFFLUENT MONITORING REQUIREMENTS IV.A.1. [Table E-3, Page E-5, Table Note 12]

The Permittee shall began monitoring for enterococci, from an ELAP accredited lab, by June 1, 2020 2021.

EFFLUENT MONITORING REQUIREMENTS IV.A.1. [Table E-4, Page E-6, Table Note 8]

The Permittee shall began monitoring for enterococci, from an ELAP accredited lab, by June 2020 2021

Response 19: Staff recognizes the need to have an ELAP accredited lab close enough to determine compliance with enterococci monitoring results. We are glad the Permittee is willing to become ELAP accredited for enterococci and hope the Permittee will be able to process samples for other NPDES permittees in the area that will be required to monitor for enterococci.

The requested time extensions have been made to Table E-3 and E-4 of the Proposed Permit.

Section VII.B.1.d. of the Fact Sheet in the Proposed Permit has been amended as follows, “This Order establishes weekly enterococci monitoring at Monitoring Location EFF-001 in order to determine compliance with applicable REC-1 bacteria provisions established in the *Water Quality Control Plan for Inland Surface Waters, Enclosed Bays and Estuaries (ISWEBE)*. The monitoring for enterococci has been delayed until the Permittee can attain ELAP accreditation for enterococci testing.”

Section VII.B.2.d. of the Fact Sheet in the Proposed Permit has been amended as follows, “This Order establishes weekly enterococci monitoring at Monitoring Location EFF-002 in order to determine compliance with applicable REC-1 bacteria provisions established in the *Water Quality Control Plan for Inland Surface Waters, Enclosed Bays and Estuaries (ISWEBE)*. The monitoring for enterococci at EFF-002 will begin once the UV disinfection system is online.”

Comment 20: *The City requests clarifications to EFF-001 monitoring requirements to state that sampling is required only if discharge occurs within the calendar year and that discharge doesn't have to continue solely to obtain a 24-hour composite sample or to meet specified toxicity sample type and duration. The following language is suggested to make that clarification.*

EFFLUENT MONITORING REQUIREMENTS IV.A.1. [Table E-3, Page E-5, Table Note 8]

When Discharge Point 001 is used for emergency discharges of flows exceeding 5.9 mgd under the upgraded Facility configuration, effluent monitoring at Monitoring Location EFF-001 shall be conducted annually when discharge occurs during a calendar year. The Permittee shall cease sample collection after the discharge ends. If the duration of the discharge is less than 24 hours or the duration required for toxicity testing, the Permittee shall either conduct the analyses using the available sample type/volume or contact the Executive Officer for authorization to waive the required analyses.

Response 20: Table E-3, Page E-5, Table Note 8 has been modified as follows:

“When Discharge Point 001 is used for emergency discharges of flows exceeding 5.9 mgd under the upgraded Facility configuration, effluent monitoring at Monitoring Location EFF-001 shall be conducted annually when discharge occurs during a calendar year. The Permittee shall cease sample collection after the discharge ends. If the duration of the discharge is less the duration required for the necessary testing method, the Permittee shall conduct the analyses using the available sample type and/or volume.

Comment 21: *The City requests use of its current species for chronic toxicity testing until the Proposed Upgrade Project is completed. At that point, the City will conduct sensitive species screening to determine the appropriate species for future testing. The following section of the Tentative will be affected by this change.*

WHOLE EFFLUENT TOXICITY (WET) TESTING REQUIREMENTS V.B.5. [Page E-10]

Response 21: Staff recognizes that species sensitivity screening will be necessary for the Proposed Upgrade Project. However, completion of Phase Two will not occur until June 30, 2024. Therefore, the Permittee will need to perform species sensitivity screen as required in sections V.A.5 and V.B.5 (acute and chronic) to determine the most sensitive species for the duration of this permit term. The Permittee will perform species sensitivity screening for the upgraded treatment plant during the next permit term. No changes have been made to the Proposed Permit.

Comment 22: *The City requests the following changes in order to provide options for responding to toxicity triggers if discharge stops before additional samples can be collected.*

WHOLE EFFLUENT TOXICITY (WET) TESTING REQUIREMENTS V.B.8. [Page E-12]

... If one of the accelerated toxicity test results is “Fail”, the Permittee shall immediately implement the TRE Process conditions set forth in section V.C, below. If the discharge

will cease before the additional samples can be collected, the Permittee shall contact the Executive Officer within 21 days with a plan to address elevated levels of chronic toxicity in effluent and/or receiving waters.

Response 22: The recommended change has been made on Page E-9 in the Proposed Permit.

Comment 23: The City is a permittee under Biosolids General Order No. 2004-0012 DWQ and follows the biosolids monitoring requirements specified in the General Order. The Tentative Order should refer to the Biosolids General Order for all sludge/biosolids requirements and Monitoring Location BIO-001 should be removed. The following revisions are recommended to modify the Tentative Order requirements for biosolids and reporting.

OTHER MONITORING REQUIREMENTS IX.C. [Page E-16]

C. Sludge Biosolids Monitoring(Monitoring Location BIO-001)

Biosolids monitoring shall be conducted as required by Order No. 2004-0012-DWQ.

1. Sludge sampling shall be conducted according to the requirements specified by the location and type of disposal activities undertaken.
2. Sampling records shall be retained for a minimum of 5 years. A log shall be maintained for sludge quantities generated and of handling and disposal activities. The frequency of entries is discretionary; however, the log must be complete enough to serve as a basis for developing the Sludge Handling and Disposal report that is required as part of the Annual Report.

REPORTING REQUIREMENTS X.D.2.f [Page E-20]

f. Sludge Handling and Disposal Activity Reporting. The Biosolids Report required by Order No. 2004-0012-DWQ will be provided as an attachment to the WWTF annual report. The Permittee shall submit, as part of its annual report to the Regional Water Board, a description of the Permittee's solids handling, disposal and reuse activities over the previous 12 months. At a minimum, the report shall contain:

- i. Annual sludge production, in dry tons and percent solids;**
- ii. Sludge monitoring results;**
- iii. A schematic diagram showing sludge handling facilities (e.g., digesters, thickeners, drying beds, etc.), if any and a solids flow diagram;**
- iv. Methods of final disposal of sludge:**
 - (a) For any portion of sludge discharged to a sanitary landfill, the Permittee shall provide**

the volume of sludge transported to the landfill, the names and locations of the facilities receiving sludge, the Regional Water Board's WDRs Order number for the regulated landfill, and the landfill classification.

- ~~(b) For any portion of sludge discharged through land application, the Permittee shall provide the volume of biosolids applied, the date and locations where biosolids were applied, the Regional Water Board's WDRs Order number for the regulated discharge, a demonstration that the discharge was conducted in compliance with applicable permits and regulations, and, if applicable, corrective actions taken or planned to bring the discharge into compliance with WDRs.~~
- ~~(c) For any portion of sludge further treated through composting, the Permittee shall provide a summary of the composting process, the volume of sludge composted, and a demonstration and signed certification statement that the composting process and final product met all requirements for Class A biosolids.~~
- ~~v. Results of internal or external third-party audits of the Biosolids Management System, including reported program deficiencies and recommendations, required corrective actions, and a schedule to complete corrective actions.~~

RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS VII.E.3 [Page F-46]

- 3. Sludge Biosolids Monitoring.** ~~The Permittee monitors biosolids and reports biosolids application practices under requirements specified in Order No. 2004-0012-DWQ. New sludge monitoring requirements at Monitoring Location BIO-001 serve as a basis for the Permittee to develop the Sludge Handling and Disposal Activity Report that is required as part of the Annual Report pursuant to section X.D.2.f of the MRP.~~

Response 23: The Regional Water Board recognizes that the Permittee is currently enrolled under the State Water Resources Control Board Water Quality Order No. 2004-0012-DWQ General Waste Discharge Requirements for the Discharge of Biosolids to Land or Use as a Soil Amendment In Agricultural, Silvicultural, Horticultural, and Land Reclamation Activities (General Order).

The Regional Water Board does not want to duplicate the reporting requirements listed in the General Order. The requested changes have been made to referenced sections of the Proposed Permit.

Comment 24: *The City requests permission to identify the "titles" of all persons employed at the facility in the annual reports instead of individual "names".*

REPORTING REQUIREMENTS X.D.2.c. [Page E-20]

The names titles and general responsibilities of all persons employed at the Facility.

Response 24: The requested changes have been made to page E-20 of the Proposed Permit.

Comment 25: *The following changes are provided to ensure accurate descriptions of the WWTF operation.*

FACILITY DESCRIPTION II.B.2. [Page F-6]

...The Permittee has evaluated the ability to disinfect all flow using UV and is currently planning to disinfect all flows flows up to 7.6 mgd through the Facility with UV.

Wastewater discharged at Discharge Point 002 will flow through Allen, Gearheart, Hauser marshes in succession. The Permittee will manage flows through Allen, Gearheart, and Hauser Marshes to preserve enhanced treatment and beneficial uses of the enhancement marshes. Flow rates determined to negatively impact the enhancement marshes and flow in excess of 5.9 mgd will be diverted around the enhancement marshes. Diverted flow will co-mingle with Hauser Marsh effluent prior to discharge to the Brackish Marsh at Outfall-003. At the design average ...

FACILITY DESCRIPTION II.B.2. [Page F-6]

The upgraded Facility configuration will provide overall improvements to effluent quality discharged to Humboldt Bay because all effluent up to 5.9 mgd ~~will~~ may receive enhanced treatment through the AMWS.

FACILITY DESCRIPTION II.F. [F-9]

The Proposed Treatment Upgrade Project will replace the chlorine disinfection system with a UV disinfection system for ~~flows not exceeding the peak wet weather peak design flows of 5.9 mgd, or greater.~~ Emergency flows, in excess of the peak design flows of 5.9 mgd, ~~will~~may be disinfected with chlorine or UV before being discharged via Discharge Point 001 or via Discharge Point 003 through the adaptive management diversion line. The Permittee is investigating the possibility of disinfecting all flows with UV and would like to maintain chlorine disinfection as a backup. Eliminating use of chlorine will reduce the number of violations for dichlorobromomethane, a chlorine disinfection byproduct. The oxidation ditch and new clarifiers will provide full secondary treatment for all flows a portion of flow, improve ammonia removal, BOD and TSS removal and likely address toxicity concerns...

*RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS
IV.B.2.b [Page F-19]*

Under the upgraded Facility configuration, the Permittee will utilize oxidation ponds (i.e., waste stabilization ponds) ~~to treat wastewater flows less than 2.3 mgd~~ and a parallel oxidation ditch system to treat wastewater flows ~~greater than 2.3 mgd~~ and up to 5.9 mgd. Effluent from the waste stabilization pond and oxidation ditch treatment trains will be commingled prior to UV disinfection and discharge to the AMWS at Discharge Point 002.

Response 25: The requested changes have been made to the referenced sections of the Proposed Permit.

Comment 26: *The nitrate water quality objective is applicable to receiving waters designated with the MUN beneficial use. Because the Tentative Order does not identify MUN for Humboldt Bay, nitrate should not have been included in the Reasonable Potential Analysis and can be removed from the following sections of the Tentative Order.*

*RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS
IV.C.3.c [Table F-6, Page F-27]*

Attachment F-1 [Page F-52]

Response 26: See response to comment 8 above. No change has been made to the Proposed Permit.

Comment 27: *The test species and method for evaluating chronic aquatic toxicity are determined through the screening process, not during each sampling event. The following change is needed to make that clarification.*

**RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS
IV.C.5.b [Page F-33]**

The receiving waters at Discharge Points 001 and 003 are estuarine and depending on tide and time of year, may range from predominantly freshwater environments to predominantly marine environments. Therefore, the Permittee, when collecting samples for toxicity, shall also determine the characteristics of the receiving water at the time of sampling species screening to ensure the proper test species and method are implemented, as described in section V of the MRP (Attachment E).

Response 27: The requested change has been made to page F-33 of the Proposed Permit.

Comment 28: *To determine compliance with ammonia effluent limitations, receiving water temperature, pH and salinity monitoring (RSW-001) must coincide with effluent total ammonia monitoring (EFF-001, EFF-003). Table E-3 and Table E-5 erroneously identify effluent ammonia monitoring requirement for pH and temperature. The following revisions are needed to clarify associated monitoring requirements.*

EFFLUENT MONITORING REQUIREMENTS IV.A.1 [Table E-3, Page E-5, Note 5]

- 5. pH, ~~and-temperature,~~ and salinity monitoring at RSW-001 shall be recorded at the time of ammonia sampling.*

EFFLUENT MONITORING REQUIREMENTS IV.C.1 [Table E-5, Page E-7, Note 4]

- 4. pH, ~~and-temperature,~~ and salinity monitoring at RSW-001 shall be recorded at the time of ammonia sampling.*

Response 28: The requested changes have been made to Table E-3 and E-5 of the Proposed Permit.

Comment 29: *The City's current NPDES permit allows use of grab samples for chronic toxicity testing since effluent quality doesn't fluctuate due to the long residence time in treatment system. The City requests approval to use grab samples to evaluate chronic toxicity at EFF-001 and EFF-003. The following sections of the Tentative Order will be affected by this change.*

EFFLUENT MONITORING REQUIREMENTS IV.A.1 [Table E-3, Page E-4]

EFFLUENT MONITORING REQUIREMENTS IV.A.1 [Table E-5, Page E-7]

Response 29: Considering that the retention time of the effluent is greater than 14 days, and in accordance with the *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (EPA 2002)*, a grab sample

is acceptable for chronic toxicity testing. Table E-3 and E-5 of the Proposed Permit has had the sample type changed from composite to grab for toxicity testing.

Time Schedule Order Comments

The Permittee also included a comment letter regarding Time Schedule Order R1-2019-0011. The Permittee made ten enumerated statements in the comment letter and stated, "If the Regional Water Board disagrees with the City's interpretations or any modifications are made to the TSO that conflict with this understanding, the City requests a formal response to comments that explains the differences as well as the basis for the Regional Water Board's final decisions."

Staff made one change to the TSO as a result of the restructuring of effluent limitations and the addition of discharge specifications as explained in Response 1, 2 and 5. As a result, interim effluent limitations for BOD and TSS at Discharge Point 002 have been removed from the TSO. The interim effluent limitations at Discharge point 002 were removed because clarification was made that Final Effluent Limitations at Discharge Point 002 do not go into effect until Phase Two of the Proposed Project is completed. Discharge Specifications for BOD and TSS in the Proposed Permit are in effect until the Proposed Upgrade project is completed. Once the Proposed Upgrade Project is completed, Final Effluent Limitations for Discharge Point 002 go into effect.

There have been no other changes made to the TSO after the public comment period. The Regional Water Board does not disagree with the Permittee's ten enumerated statements.

Staff Initiated Changes

As Staff reviewed the comments submitted and updated the Proposed Permit, we identified additional changes that needed to be made for clarification. These modifications did not change the substance of the Proposed Permit but focused on the structure to provide clarity as the Permittee moves through the phasing of the Proposed Upgrade Project. The Proposed Permit has been modified to incorporate these changes, as follows:

1. On September 18, 2019, Staff had a phone call with the Permittee's UV consultant to discuss the UV language included in the Proposed Permit. The consultant requested that language be added to page 10 Section IV.E.1.B. of the Proposed Permit that stated, "Prior to initial discharge at Discharge Point 003, the Permittee shall submit to the Executive Officer approval, an operations and maintenance plan detailing how compliance with the National Water Research Institute's guidelines or the U.S. EPA UV Disinfection Guidance Manual will be assured at all times."

The U.S. EPA UV Disinfection Guidance Manual was requested because the National Water Research Institute's guidelines speak to wastewater that is filtered to meet Title 22 Recycled Water Requirements. The U.S. EPA UV Disinfection Guidance Manual is appropriate for the secondary treated effluent that will produced at the Facility. The requested change has been made to the

Proposed Permit. In review of the Proposed Permit Staff included a new footnote on page 5, Discharge Prohibition III.I, that states, Discharge Prohibition III.I shall take effect upon completion of Phase One of the Proposed Upgrade Project which includes construction of Discharge Point 003 to the Brackish Marsh."

2. Staff updated the name of the Climate Change Readiness Action Plan to the Disaster Preparedness Assessment Report and Action Plan. This update in terminology is consistent with how the Regional Water Board is evaluating the ability of all Permittees to manage potential disasters that can impact the Facility's ability to meet Permit conditions.

On page 19-20 of the Proposed Permit, Section VI.C.2.c. has been modified to include the following language:

"Disaster Preparedness Assessment Report and Action Plan. Climate Change Readiness Study Plan. ~~Natural disasters, Extreme weather events, sea level rise, and shifting precipitation patterns, and temperature variability,~~ some of which are projected to intensify due to climate change, have significant implications for wastewater treatment and operations. Some natural disasters are expected to become more frequent and extreme according to the current science on climate change. In order to ensure that Facility operations are not disrupted, compliance with conditions of this Order are achieved, and receiving waters are not adversely impacted by permitted and unpermitted discharges, ~~a Climate Change Readiness Study Plan shall be submitted~~ the Permittee shall submit a Disaster Preparedness Assessment Report and Action Plan to the Regional Water Board by **June 1, 2021 2022**, for Executive Officer review and approval.

The Permittee shall: (1) conduct an assessment of the wastewater treatment facility, operations, collection, and discharge systems to determine areas of short- and long-term vulnerabilities related to ~~climate change~~ natural disasters and extreme weather, including sea level rise and other conditions projected by climate change science, if applicable; the assessment shall consider, as applicable, impacts to plant operations due to changing influent and receiving water quality, rising sea level, storm surges, fires, floods, earthquakes, tsunamis, back-to-back severe storms, and other extreme conditions that pose a risk to plant operations and water quality; (2) identify control measures needed to protect, improve, and maintain wastewater infrastructure, waste discharge compliance, and receiving water quality ~~under changing climate conditions~~ in the event of a natural disaster or, if applicable, under conditions resulting from climate change; (3) develop a schedule to implement necessary control measures. Control measures shall include, but are not limited to, emergency procedures, contingency plans, alarm/notification systems, training, backup power and equipment, and the need for planned mitigations to ameliorate ~~climate-induced impacts such as changing influent and receiving water quality and conditions, as well as the impact of rising sea level, storm surges, and back-to-back severe storms that are expected to become more frequent.~~ potential risks associated with extreme weather events and changing conditions resulting from

climate change; and (4) implement the necessary control measures per the approved schedule of implementation.”

On page F-44 of the Fact Sheet, Section VI.B.2.b. has been modified to include the updated language for the Disaster Preparedness Assessment Report and Action Plan.

3. Table Note 10 on Table E-3 was modified to state, “Chlorine residual monitoring at Monitoring Location EFF-001 shall demonstrate that chlorine residual complies with effluent limits in Table 4 and Table 5 during periods of discharge to Humboldt Bay. Samples collected to demonstrate complete dechlorination shall be collected at a point following disinfection and prior to discharge to Humboldt Bay. All chlorine residual measurements shall be reported as total chlorine residual. This monitoring requirement applies when chlorine is used as a disinfection system.”
4. Section IV.C.3.a.ii of the Fact Sheet was added to include a discussion on the enterococci coliform bacteria provisions and the rationale for not requiring effluent limitations in the Proposed Permit. The following language was added:

Enterococci Coliform. On August 7, 2018, the State Water Board adopted Part 3 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California – Bacteria Provisions and a Water Quality Standards Variance Policy (Statewide Bacteria Provisions), which establishes water quality objectives for reasonable protection of people that recreate within all surface waters, enclosed bays, and estuaries of the state that have the water contact recreation beneficial use (REC-1). In accordance with the water quality objectives outlined in the Statewide Bacteria Provisions for the protection of freshwaters used for water contact recreation, disinfected effluent shall not contain enterococci bacteria exceeding the following limitations:

The concentration of enterococci shall not exceed 30 colony forming units (cfu) per 100 milliliters (mL) as a six-week rolling geometric mean, calculated weekly.

A statistical threshold value (STV) of 110 cfu/100 mL shall not be exceeded by more than 10 percent of the samples collected in a calendar month and calculated in a static manner.

As discussed in section IV.C.3.a.ii above, this Order contains effluent limitations for fecal coliform bacteria that reflect standards for the protection of shellfish harvesting areas. Because enterococci is a subset of the total coliform group, the enterococci limitations established in the Statewide Bacteria Provisions are not as stringent as the Basin Plan fecal coliform standards implemented in this Order.

Section IV.E.1 of the Statewide Bacteria Provisions states that “where a permit, WDR, or waiver of WDR includes an effluent limitation or discharge requirement derived from a water quality objective, guideline, or other requirement to control bacteria that is a more stringent value than the applicable bacteria water quality

objective, the bacteria water quality objective shall not be implemented in the permit, WDR, or waiver of WDR.”

The effluent limitations established for fecal coliform will ensure that bacterial standards for water contact recreation are maintained throughout the receiving water.

5. Section VII.B.1.e. of the Fact Sheet in the Proposed Permit was modified to include rationale for mercury monitoring, included as part of the twice per permit term priority pollutant scan, to verify that the Subsistence Fishing (SUB) beneficial use is being protected consistent with the Statewide Mercury Provisions.
6. Table Note 12 was added to Table E-5 of the MRP to clarify when monitoring for BOD and TSS at EFF-003 shall occur. The new Table Note 12 states, “BOD and TSS shall be monitored at EFF-003 for compliance with Technology-Based Effluent Limitations after Phase One and before Phase Two of the Proposed Upgrade Project is complete. Once Phase Two of the Proposed Upgrade Project is completed, monitoring for BOD and TSS at EFF-003 can be discontinued as compliance with TBELs will be determined at EFF-002.”
7. Table Note 13 was added to Table E-5 of the MRP to clarify when monitoring for fecal coliform shall occur. The new Table Note 13 states, “Fecal coliform bacteria samples may be collected at any point downstream of the UV disinfection process. Monitoring for fecal coliform shall start once Phase One of the Proposed Upgrade Project is completed. Monitoring for fecal coliform shall be discontinued at EFF-003 once Phase Two of the Proposed Upgrade Project has been completed.”
8. Section II.B.2. of the Fact Sheet has been modified to include language regarding the phasing of the Proposed Upgrade Project. The modified language states:

“The Permittee is planning to upgrade the Facility in two phases. Phase One of the project will consist of rehabilitation of the headworks and primary clarifier, new aerators in oxidation pond one, addition of a baffle wall and aerators in oxidation pond two, improvements to multiple pump stations, construction of the UV disinfection system and the construction of piping for Discharge Point 003. Completion of this phase will allow for peak flows to be discharged to Discharge Point 003.

Phase Two of the project will include construction of the oxidation ditch, secondary clarifiers, return activated sludge pump station, an alkalinity feed station and rehabilitation of the anaerobic digester. The rehabilitation of the anaerobic digester will include digester cleaning, replacing digester covers, replacing the boiler/heat exchanger, replacing the mixing and heating piping in the primary digester as needed, adding a sludge thickening system and relocating composting facilities to a new area on site. Completion of this phase will allow the Permittee to comply with final effluent limitations for ammonia at

Discharge Point 001 and Discharge Point 003 as well as more stringent BOD and TSS limitations at Discharge Point 002. Time Schedule Order No. R1-2019-0011 includes task and compliance dates for completion of Phase One and Phase Two of the Proposed Upgrade Project.

~~including improvements to the oxidation pond and wetland treatment system and addition of a parallel oxidation ditch treatment system, consisting of two new oxidation ditches and two new secondary clarifiers.~~ The wetland treatment system train and parallel oxidation ditch train will each treat a portion of the influent flow at variable percentages. The wetland treatment system will treat the majority of the influent flow up to 2.3 mgd. The parallel oxidation ditch treatment train will provide BOD₅ removal and year-round full nitrification treatment capacity to handle the remainder of the hydraulic capacity needs up to 5.9 mgd.

9. Section IX.A.1.b. of the MRP has been removed because compliance language for Monitoring Location INT-001 (UV Disinfection) is already listed in IV.G.1 of the Proposed Permit.
10. Section II.C. on page F-7 of the Fact Sheet has been updated to clarify when each discharge point will be in use and what effluent limitations and discharge specifications are required per the phasing of the proposed Upgrade Project.
11. Minor changes were also made to the Proposed Permit to correct typos.